

# Mississippi River Action Plan

## Freight Advisory Council Briefing

August 2013

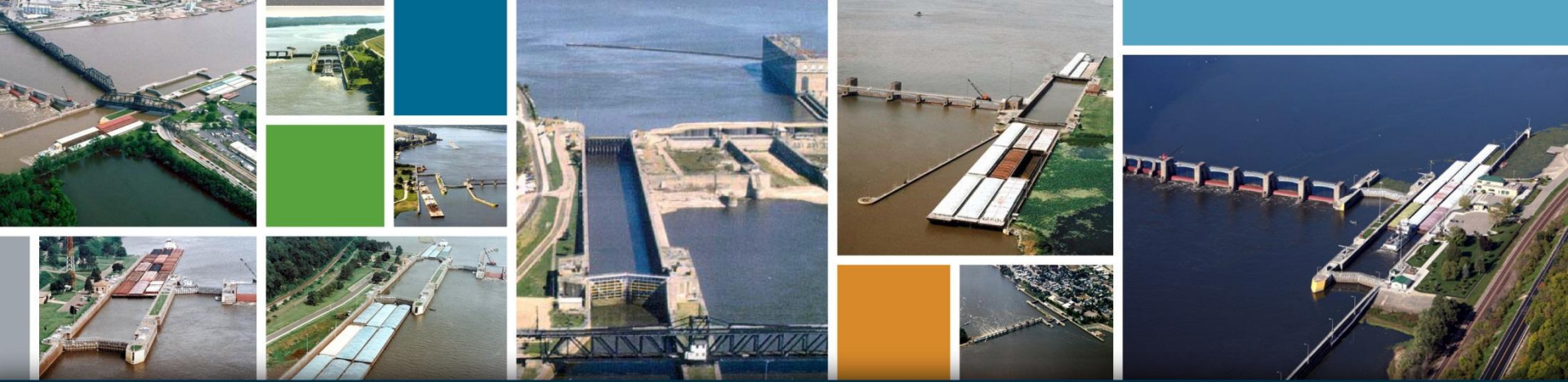


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# Outline

- Reconnaissance Study
- Workshop Summary
- Action Plan



# U.S. Inland Waterway Modernization:

## A Reconnaissance Study



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# Study Purpose

*Evaluate options to sustainably fund maintenance and improvements to Iowa's Lock and Dam system*

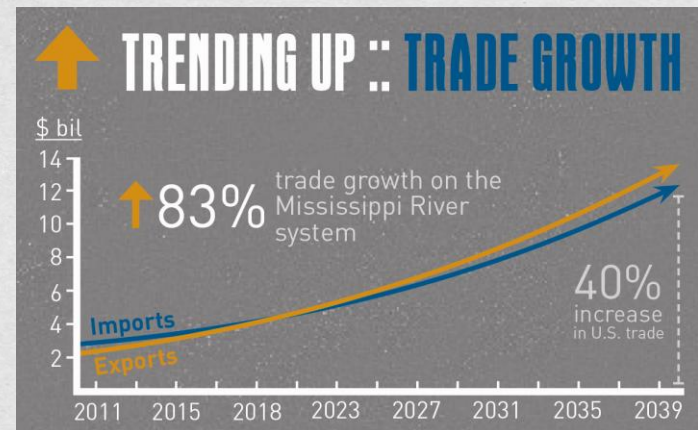
# Current State

- U.S. inland waterway infrastructure received a **D- grade** from the American Society of Civil Engineers (ASCE)
- Chronically underfunded
- Crumbling infrastructure
- Seriously affects U.S. competition for global trade
  - our economy relies on low transportation costs to offset higher wages and cost of production



# Future Trends for Inland Waterways

- Overall freight transport will have high growth; proportion of transport by water to stay steady
- Tonnage on U.S. inland waterways will increase 23% by 2025, and 40% by 2040
- 83% trade growth increase on Mississippi River System from 2010 to 2040
- Iowa's share of total tonnage along Mississippi will more than double from 6% to 13% by 2040



# Benefits of Improved System

## Economic Benefits of Barge Freight Passing Through Iowa Lock and Dam 19, 2011

Annual Economic Benefits (\$M)	
Reduced shipping/transportation costs	\$384.0
Reduced emissions	\$29.3
Reduced maintenance	\$34.3
Reduced roadway congestion	\$0.0
Reduced accidents	\$78.4
<b>Total Economic Benefits</b>	<b>\$525.9</b>

Source: HDR Commercial Analysis, Appendix C

# If No Action is Taken

- Cannot maintain infrastructure at current funding level
- Critical age and capacity thresholds reached by 2020
- Move to other transport modes increases deterioration and cost for those systems
- Loss of economic benefits
- Missed opportunity with Panamax





# FUND

or

# FAIL?

## WHY INVEST IN OUR INLAND WATERWAYS?

Move **MORE**

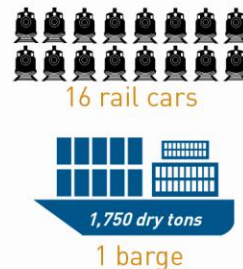
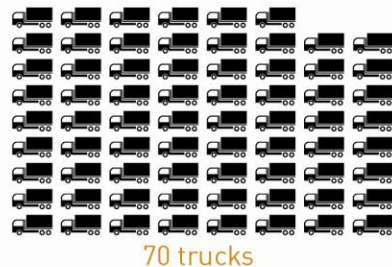
 **\$4.0B** Annual economic benefits /year

With **LESS**

 **\$10.67** LESS vs. truck & rail costs /ton

 **52** LESS GHG emission vs. truck tons/million ton-mile

 **8** LESS GHG emission vs. rail tons/million ton-mile



## WHAT HAPPENS IF WE ALLOW OUR INLAND WATERWAYS TO FAIL?

 -730,000 accumulated loss in jobs by 2020

 -\$1.3T accumulated loss in sales by 2020

 -\$700B accumulated loss to GDP by 2020

 -\$270B accumulated loss in value of exports by 2020



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# Funding Option Evaluation

Option	Timeliness	Full System Solution	Stand Alone Solution	Administrative Ease
No Action	Yes	Yes	No	Yes
Partial Divestiture	No	No	No	Yes
Funding from traditional sources	Yes	Yes	Yes	Yes
Partnerships	No	TBD	TBD	No



# New Funding Approaches Needed

- Increased funding from traditional sources only a short term solution
- Long-term options
  - Partial divestiture of the system
    - need further study to understand long-term impacts of divestiture
  - Public Private Partnerships (P3s) are not an option until major system repairs and upgrades are completed
  - Increased funding from traditional sources can only be part of a more comprehensive funding system



What other funding options should be considered?





# Fuel Tax Revenue

- Large changes in the fuel tax rate lead to relatively small changes in overall shipping rate
- Current rate is 20¢/gallon
- Rate of 33¢/gallon = \$50 million/year increase in revenue
- Explore indexing fuel tax rates to inflation

# Partnerships

- Public-Public
  - Between governments and/or non-profit
- Public-Private (P3)
  - Design-Build (DB) and variations
    - Single private entity contracted to design and build
  - Design-Build with Private Financial Participation (PFP)
    - Private sector financing used for project
  - Pre-Development Agreements
    - Private sector partner works on the feasibility phase then gets first negotiation rights to develop and implement

# Key Findings

- No action will result in loss of economic benefits and a missed opportunity with Panamax
- Partial divestiture should be examined if there is no new funding, but will need more study
- Public Private Partnerships are not an option until major system repairs and upgrades are completed
- Increased funding from traditional sources can only be part of a more comprehensive funding system



# Study Recommendations for Congress

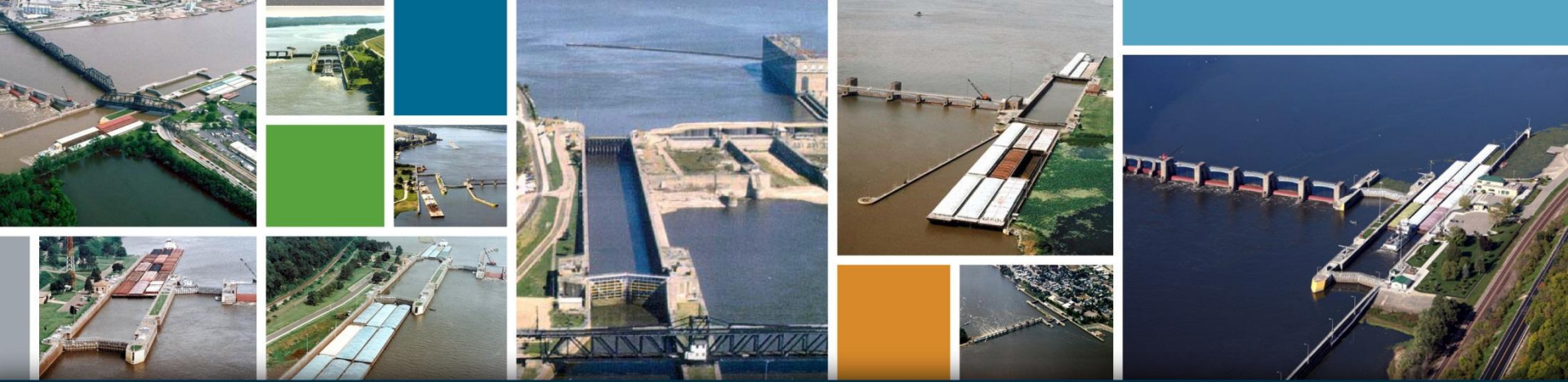
## Congress

- Pass the 2013 Water Resources Development Act (WRDA) Bill
- Allow pilot programs for non-federal sponsors to work on federal projects
- Allow alternative project delivery and funding
- Adequately fund USACE Civil Works and Navigation Programs
- Explore indexing fuel tax rates to inflation
- Authorize USACE to study additional funding options

# Study Recommendations for Iowa

## Iowa

- Create a coalition of Upper Mississippi River states and inland waterway interest groups to drive the legislative agenda
- Implement a pilot project in line with the 2013 WRDA Bill



# Mississippi River Action Plan

## Workshop Summary



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# Workshop Overview

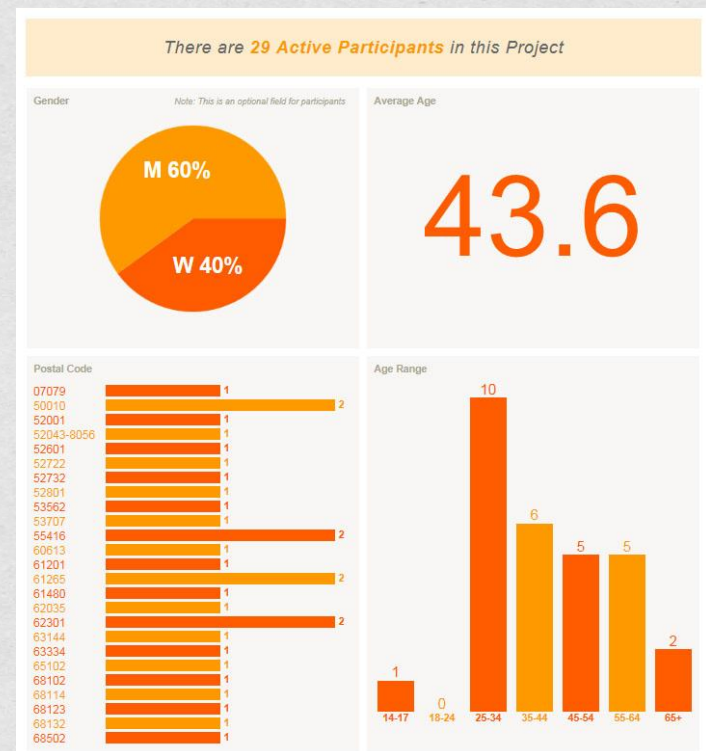
A one-day workshop to engage a range of stakeholders in the planning process for the Mississippi River Action Plan:

- Thursday, July 27th, 2013
- Consolidate stakeholder issues, concerns and priorities with the current lock and dam system along the Upper Mississippi River System.
- Recommend pilot projects for the Iowa DOT
- 60 attendees, including representatives from:
  - State Departments of Transportation
  - U.S. Army Corps of Engineers
  - Elected officials from states bordering the Mississippi River
  - Industries related to freight transportation
  - Special interest groups



# MindMixer Overview: IowaLockandDamActionPlan.com

Interactive Website: to engage stakeholders and generate conversations amongst stakeholders prior to the workshop

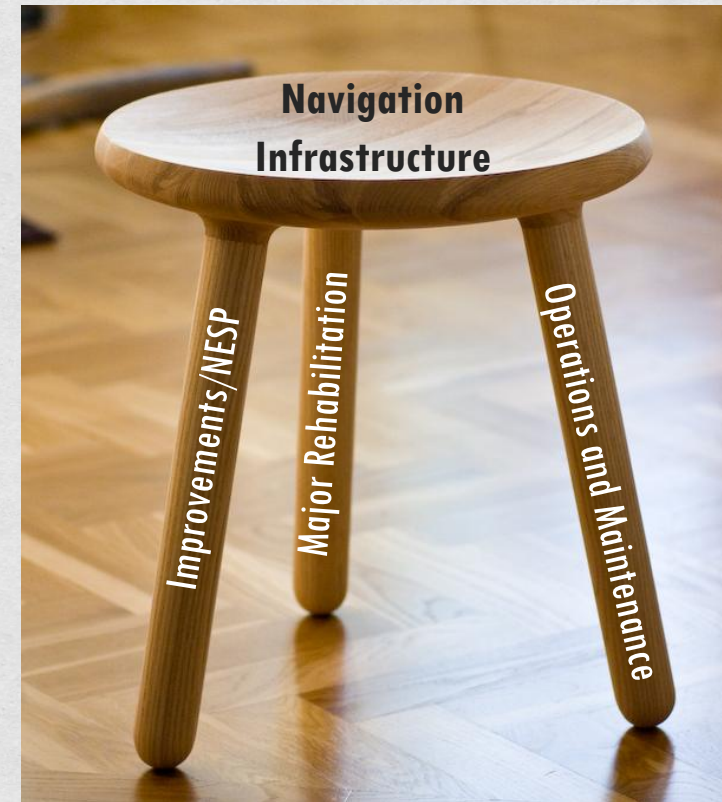




# U.S. Army Corps of Engineers Presentation

Presentation by Gary Meden of the USACE Rock Island District:

- **Mississippi River Navigation Infrastructure**
  - Navigation authorization (9-foot channel)
  - State of the infrastructure
  - Types of funding to maintain/improve capabilities
  - Funding trends (O&M, Major Rehab, Construction)
  - Issues (Inland Waterway Trust Fund, No Earmarks)
  - Why does river navigation matter to the Upper Midwest and the Nation?
  - Lockage priorities





# Highest Priority Work in Rock Island District

- Based on U.S. Army Corps of Engineers prioritization.

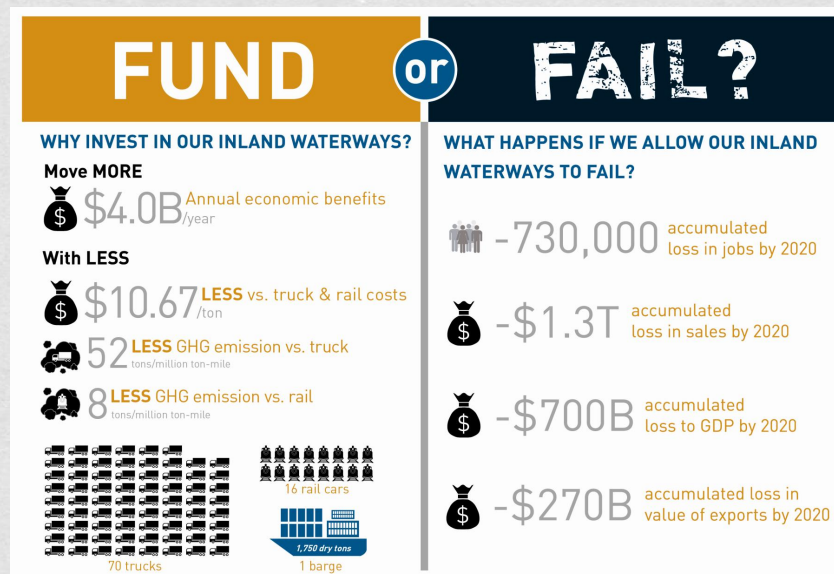
Work/Project	Cost Estimate (\$M)	Funding Type
Lagrange Major Rehab	56.5	Construction
Lagrange Miter Gates	4.0	O&M
Peoria Miter Gates	4.0	O&M
Lagrange Lock Major Maint	14.3	O&M
Joliet Channel Wall Repair	5.1	O&M
Miss. Miter Gates 3 locations	23.1	O&M
Miss. Bulkhead Slots 7 locations	54.2	O&M
Dresden Replace Dam Gates	9.9	O&M
O'Brien Major Maintenance	13.0	O&M
Dam Gate Rehab (L/D 15, 21, 22)	13.0	O&M
L/D 19 Concrete work	34.0	O&M
O'Brien Major Rehab	23.9	Construction
L/D 15	TBD	TBD
L/D 18	TBD	TBD
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# U.S. Inland Waterway Modernization Study

## Presentation on key findings and study recommendations:

- Evaluates options to sustainably fund maintenance and improvements to Iowa's Lock and Dam system
- Key findings
  - No action will result in loss of economic benefits and a missed opportunity with Panamax
  - Partial divestiture should be examined if there is no new funding, but will need more study
  - Public Private Partnerships are not an option until major system repairs and upgrades are completed
  - Increased funding from traditional sources can only be part of a more comprehensive funding system
- Recommendations for Congress
  - Pass the 2013 Water Resources Development Act (WRDA) Bill
  - Allow pilot programs for non-federal sponsors to work on federal projects
  - Allow alternative project delivery and funding
  - Adequately fund USACE Civil Works and Navigation Programs
  - Explore indexing fuel tax rates to inflation
  - Authorize USACE to study additional funding options
- Recommendations for Iowa
  - Create a coalition of Upper Mississippi River states and inland waterway interest groups to drive the legislative agenda
  - Implement a pilot project in line with the 2013 WRDA Bill



# Visioning Process: SWOT Analysis

- Defined opportunities and constraints of the system and develop a unified vision for the action plan.

Strengths	Weaknesses
<ul style="list-style-type: none"><li>• The Mississippi River provides an efficient way to move goods environmentally and economically</li><li>• The Mississippi River is a significant economic asset</li><li>• The benefits of the river extend to all of society</li><li>• The river links the Upper Mississippi region to the world</li><li>• The Upper Mississippi provides for multiple uses</li></ul>	<ul style="list-style-type: none"><li>• The lack of consistently sufficient funding for river infrastructure and Operations &amp; Maintenance</li><li>• The lack of awareness and understand among policymakers</li><li>• The risk of structural deficiencies due to age</li><li>• Inadequate dollars</li><li>• Fragmented decision making at federal, state, and local levels</li></ul>
Opportunities	Threats
<ul style="list-style-type: none"><li>• To piggy-back on national infrastructure initiatives</li><li>• To spur local economic development</li><li>• To ease congestion on other modes</li><li>• To collaborate with other stakeholders</li><li>• To capture Post-Panamax opportunities</li></ul>	<ul style="list-style-type: none"><li>• The lack of funding</li><li>• Major failure of a system component</li><li>• Losing global competitiveness</li><li>• Deferred maintenance</li><li>• Lack of predictable funding</li></ul>

(Top 5 Priorities of workshop participants)



# Issue Identification & Categorization

- The following perspectives were discussed to identify and understand the full breadth of issues faced by the Mississippi River System: Environmental, Regulatory, Economics, Navigation, and Recreation

## Issue Themes

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Alternative funding</li><li>• Bonding</li><li>• Economic benefit</li><li>• Environmental sustainability</li><li>• Demand</li><li>• Global competitor</li><li>• Jobs/workforce</li><li>• Industry</li><li>• Integrated water management</li></ul> | <ul style="list-style-type: none"><li>• Legislation</li><li>• Multi-modal system planning</li><li>• Predictability and certainty in funding and operations</li><li>• Public awareness</li><li>• Public benefits</li><li>• Regional planning</li><li>• Service Consolidations</li><li>• Whole system management</li></ul> |
|--|--|

# Pilot Projects

- To gather information to develop what a pilot program may look like.

## Brick and Mortar Projects

- Improve Lock 15 with a fixed guide wall
- Public, Private, Partnership with Soybean Council on maintenance and mechanical operations
- Standardize the entire lock and dam system
- Branding/public awareness campaign
- Select an implementation project based on USACE prioritization
- Improve Lock 18 as a multi-modal operation



# Pilot Projects

## Studies

- State investment/bonding
- Investigate current Harbor Maintenance Fund framework to identify elements applicable to Inland Waterways
- Alternative funding sources with and without the USACE
- Evaluate using dam pools for upstream and downstream benefits
- An Upper Mississippi River Business Plan
- Highlight value/efficiency of predictable funding
- Examine return of the state/ federal fuel user fees
- Investigate use of shorter life-span locks or smaller investments now
- Regional Freight Study



# Action Plan Next Steps

- Engaging Stakeholders
- Developing Pilot Projects for Implementation